

+Material Safety Data Sheet
May be used to comply with
OSHA's Hazard Communication Standard,
29 CFR 1910.1200. Standard must be consulted
for specific requirements.

U.S. Department of Labor
Occupational Safety and Health Administration
(Non-Mandatory Form)
Form Approved
OMB No. 1218-0072

IDENTITY (As Used on Label)

Bonide Ground Force Vegetation Killer Ready to Use

ID # 2287144

Date: July 30, 2012

Section I- Product & Company Information

Manufacturer:

Bonide Products, Inc.
6301 Sutliff Road
Oriskany, NY 13424

(800) 424-9300 (Chemtrec)
(315) 736-8231

Section II – Hazardous Identification

Hazardous Components (Specific Chemical Identity: Common Name(s)	OSHA PEL	ACGIH	TLV	Other Limits	% (Optional)
Isopropylamine salt of glyphosate CAS#1071-83-6					1.020 %
Imazapyr, isopropylamine salt CAS #81334-34-1					0.018%

Airborne limit - No specific occupational exposure limits have been established.

EMERGENCY OVERVIEW CAUTION! Causes substantial but temporary eye injury. Harmful if Inhaled or swallowed. Avoid contact with eyes and clothing. Wash with soap and water after handling.
KEEP OUT OF REACH OF CHILDREN.

Section III – First Aid

EYES: Flush eyes immediately with fresh water for at least 15 minutes while holding the eyelids open. Remove contact lenses after 5 minutes if worn, and then continue flushing. Call a poison control or doctor for treatment advice.

SKIN: Remove contaminated clothing and jewelry. Wash skin thoroughly with soap and water for 15 minutes.

INGESTION: If swallowed, immediately telephone a poison control center, emergency treatment center or a physician for advice. DO NOT make person vomit unless directed to do so by medical personnel. If medical advice cannot be obtained, then immediately take person and product container with label to an emergency treatment center. Immediately offer water to drink.

INHALATION: If respiratory discomfort or irritation occurs, move the person to fresh air. See a doctor if discomfort or irritation continues.

MEDICAL CONDITIONS AGGRAVATED BY EXPOSURE: Inhalation of product may aggravate existing chronic respiratory problems such as asthma, emphysema or bronchitis. Skin contact may aggravate existing skin condition.

Section IV - Fire and Explosion Hazard Information

FLASH POINT: Not Applicable.

AUTO IGNITION: Not Applicable.

FIRE EXTINGUISHING MEDIA: Water spray, dry chemical, Carbon dioxide or alcohol foam.

FLAMMABLE LIMITS (Percent by Volume): No data available.

FIRE FIGHTING INSTRUCTIONS: This material will not burn. Avoid breathing smoke and mists. Avoid contact with fallout and runoff. Minimize the amount of water used for fire fighting. Do not enter any enclosed area without full protective equipment, including self-contained breathing equipment. Contain and isolate runoff and debris for proper disposal. Read the entire document. Equipment should be decontaminated after using.

HAZARDOUS PRODUCTS OF COMBUSTION: Toxic fumes may be produced such as: carbon monoxide (CO), phosphorus oxides (P_xO_y), nitrogen oxides (NO_x).

UNUSUAL FIRE & EXPLOSION HAZARD: If water is used to fight fire, contain runoff, using dikes to prevent contamination of water supplies dispose of fire control water later. This product reacts with galvanized steel or unlined steel (except stainless) to produce hydrogen gas that may form a highly combustible gas mixture which could flash or explode.

Section V – Accidental Release Measures

Steps to be taken in case material is released or spilled:

SMALL SPILL: Soak up spilled material with paper towels and discard in trash.

LARGE SPILL: Liquid spills on floor or other impervious surfaces should be contained or diked, and should be absorbed with attapulgite, bentonite or other absorbent clays. Collect contaminated absorbent, place in plastic-lined metal drum and dispose of in accordance with instructions provided under Section VII. Thoroughly scrub floor or other impervious surface with a soap & water solution. For liquid spills that soak into the ground, contact the

applicable Federal, State and or County Health Dept. for disposal recommendations. If disposal is required then refer to Section VII for instructions.

Leaking containers should be separated from non-leaking and either the container or its contents transferred to a drum or other non-leaking container and disposed of in accordance with instructions provided under Section VII. Any recovered spilled liquid should be similarly collected and disposed of. Do not contaminate water, foodstuffs, or feed by storage or disposal. Prevent material from entering sewers. Do not flush to drain.

Section VI – Handling & Storage

HANDLING & STORAGE: Avoid contact with eyes, skin and clothing. Avoid breathing vapor or mist. Wash hands thoroughly after handling or contact. Wash contaminated clothing before re-use. Good industrial practice in housekeeping and personal hygiene should be followed. Product may be mildly irritating or harmful if absorbed through the skin.

DO NOT MIX, STORE OR APPLY THIS PRODUCT OR SPRAY SOLUTIONS OF THIS PRODUCT IN GALVANIZED STEEL OR UNLINED STEEL (except stainless steel) CONTAINERS OR SPRAY TANKS. Contact with galvanized or unlined steel may evolve Hydrogen Gas which may form a highly combustible gas mixture.

Keep away from food, drink and animal feed. Protect water sources. **DO NOT REUSE CONTAINERS.**

GENERAL PROCEDURES: Keep pesticide in original container. Avoid breaking or puncturing container. Store in a secure, preferably locked, storage area. Protect container from freezing. Do not contaminate drains, sewers and water ways when disposing of equipment rinse water. **DO**

STORAGE TEMPERATURE: Do not store below 32° Fahrenheit.

Section VII – Exposure Controls/Personal Protection

PERSONAL PROTECTION:

EYES AND FACE: For application of product in accordance with label instructions, safety glasses, goggles or face shield should be worn. Handling of the product is not likely to present an eye exposure concern during normal handling.

SKIN: Chemical resistant gloves such as nitrile or rubber. Avoid prolonged or frequently repeated skin contact with this material. Wash thoroughly with soap and water after handling.

RESPIRATORY: Handling of this product is not likely to present an airborne exposure concern during normal handling. In the event of an accidental discharge of the material during manufacture, use or handling which produces a heavy mist, workers should put on respiratory protection equipment. Consult respirator manufacturer to determine appropriate type of equipment. Observe respirator use limitations specified by NIOSH MSHA or the manufacturer. For application of product in accordance with label instructions, no special respiratory protection is required.

ENGINEERING CONTROLS: No special ventilation is usually necessary. However, if operating conditions create high airborne concentrations of this material, special ventilation may be needed.

Section VIII – Chemical & Physical Information

APPEARANCE AND ODOR: Tan / light brown Liq.	SOLUBILITY (water): completely miscible
BOILING POINT: > 210° F	SPECIFIC GRAVITY: 1.0-1.01
FLASH POINT: Does not flash-water based	
EVAPORATION RATE (Butyl Acetate =1): Not determined	VAPOR PRESSURE: Not determined
PERCENT VOLATILE (By Volume): Not determined	pH: 6.2 -6.7

Section IX – Stability & Reactivity Information

STABILITY: Stable

CONDITIONS TO AVOID: Excessive heat. Do not store near heat or open flame.

HAZARDOUS DECOMPOSITION PRODUCTS: Toxic fumes and gases may be generated.

INCOMPATIBILITY (Avoid contact with): this product reacts with galvanized steel or unlined drums to produce hydrogen gas. May react with strong bases and oxidizing agents, such as chlorates, nitrates, peroxides, etc.

HAZARDOUS POLYMERIZATION: Will not occur

Section X – Toxicological Information:

Chronic effects/carcinogenicity – Repeated overexposure to glyphosate may decrease body weight gains and effect to liver. For Imazapyr, no adverse effects at approximately 1,7000 mg/kg/day (highest dose tested). Not a listed or known carcinogen by NTP, IARC or OSHA. fEPA has fiven glyphosate a Group E classification (evidence of non-carcinogenicity in humans). May cause irritation to mucous membranes or respiratory tract.

